

### **REMARKS**

Reconsideration of the application, as amended, is respectfully requested.

#### **I. STATUS OF CLAIMS**

Claims 1-20 are pending. Claim 1 has been amended to further clarify "...that pins are disposed on at least one of the absorption stages, the anneal stages or the cooling stages and move upward and downward to separate the silicon wafers from at least one of the absorption stages, the anneal stages or the cooling stages".

Support for the above amendment may be found throughout the specification as originally filed. No new matter has been added by virtue of this amendment.

#### **II. 35 U.S.C. 103(a) Rejections**

Claims 1-20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,816,098 to Davis ("the Davis patent") in view of U.S. Patent No. 5,909,994 to Blum et al. ("the Blum patent").

To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. (See MPEP 2143.03; *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)).

In response, it is respectfully asserted that the combination of Davis and Blum fails to teach or suggest all of the features recited in claims 1 and 12.

The combination of Davis and Blum fails to teach or suggest a remote plasma enhanced cleaning apparatus wherein pins move upward and downward to separate the silicon wafers from at least one of the absorption stages, the anneal stages or the cooling stages, as essentially recited in claims 1 and 12.

Moreover, the combination of Davis and Blum also at the very least fails to teach or suggest a remote plasma enhanced cleaning apparatus which includes an absorption assembly having absorption stages, an anneal assembly having anneal stages and a cooling assembly

having cooling stages and wherein each of these assemblies are disposed together in a main process chamber, as essentially recited in claims 1 and 12.

Although Davis may describe that several process modules may be contained within a single process station, Davis still at the very least fails to teach or suggest a remote plasma enhanced cleaning apparatus which includes an absorption assembly having absorption stages, an anneal assembly having anneal stages and a cooling assembly having cooling stages and wherein each of these assemblies are disposed together in a main process chamber, as essentially recited in claims 1 and 12. The above point was conceded by the Examiner in the instant Office Action. **(See page 3 of the instant Office Action).**

Furthermore, the combination of Davis with Blum fails to cure the above deficiency of the Davis patent. As with Davis, Blum is also completely silent regarding an apparatus which includes an absorption assembly having absorption stages, an anneal assembly having anneal stages and a cooling assembly having cooling stages and wherein each of these assemblies are disposed together in a main process chamber.

In contrast, Blum describes a processing system 100 which includes one or more processing chambers 106, wherein each processing chamber 106 includes two processing regions 618, 620 in which individual wafers are concurrently processed. However, Blum fails to disclose more than one processing assembly per processing chamber 106. In other words, Blum fails to teach or suggest one processing assembly for absorption having absorption stages, another processing assembly for annealing having annealing stages and another processing assembly for cooling having cooling stages, all of which are located within the same processing chamber. Rather, in Blum all of the processing of the wafers takes place at only these two process regions 618, 680. **(See Columns 12-14 of Blum).**

Consequently, if Davis and Blum were combined one would skilled in the art might obtain a remote plasma enhanced cleaning apparatus having a processing chamber which included two processing regions in which individual wafers may be concurrently processed at these two processing regions. However, for at least the reasons discussed, the above combination would at the very least fail to provide a remote plasma enhanced cleaning apparatus which included an absorption assembly having absorption stages, an anneal assembly having

anneal stages and a cooling assembly having cooling stages, wherein each of these assemblies are disposed together in a main process chamber, as required by claims 1 and 12.

Therefore, for at least the reasons set forth above, withdrawal of the above rejection to claims 1 and 12 is respectfully requested. As claims 2-11, depend from and incorporate all of the limitations of claim 1 and claims 13-20 depend from and incorporate all of the limitations of claim 12, withdrawal of rejections to these dependent claims is likewise requested.

### III. CONCLUSION:

In summary, applicants respectfully submit that the instant application is in condition for allowance. Early notice to that end is earnestly solicited.

If a telephone conference would be of assistance in furthering prosecution of the subject application, applicant requests that the undersigned be contacted at the number below.

Respectfully submitted,



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